ABSTRACT

The method decomposes the radio frequency signal into sub-bands by filtering, for example with a time-frequency transform. From the coefficients acquired through decomposition a matrix of spectral coefficients is obtained, from which local estimators are obtained, constituted in particular by the coefficients of the interpolating polynomials. The statistical distribution of the local estimators is evaluated in windows overlaid on the ultrasound frame. The conformation of the distribution histograms of the spectral coefficients provides a parameter which, combined with the local estimators, provides weighted local estimators, which contain spectral information useful in the identification of specific structures in the organ subjected to ultrasound analysis.

5